



Recommended Interior Light Intensities for Food Processing Plants

The amount of light needed for food processing operations depends on the functions that occur in the particular place. In general, the more critical the operation is in protecting food from contamination, the greater the required light intensity. At least 50 foot candles (540 lux) is required in processing areas where food employees work with utensils or equipment such as knives, slicers, grinders, or saws where employees safety is a factor. Even higher intensities of 100 foot candles (1080 lux) or more is needed in areas where inspections are conducted on the product or packaging materials.

Less intense light is needed in receiving areas, walk in refrigerators, storage areas, locker rooms, and restrooms. Nevertheless, lighting should be adequate to conduct operations in a safe and efficient manner. Darker colored walls and floors may require additional lighting.

Examples of areas within food processing facilities and recommended light levels are provided below.

Functional Area	Foot candles	Lux
Product inspection	110-130	1180-1400
Packaging	70-80	750-860
Maintenance areas	70-80	750-860
Administrative offices	60-90	645-970
Processing areas	55-65	590-700
Cafeteria	40-50	430-540
Locker and rest rooms	30-50	320-540
Bulk ingredient storage	30-40	320-430
Ingredient warehouse	20-30	215-320
Finished product warehouse	20-30	215-323

Raw material receiving

20-30

215-320

Adapted from: Graham, D.J. 1991. "Sanitary Design: A Mind Set". Dairy, Food, and Environmental Sanitation. November 1991.